CITY OF SAN JOSE
CAPITAL OF SILICON VALLEY

Department of Public Works
CITY FACILITIES ARCHITECTURAL SERVICES DIVISION

December 17, 2008

ADDENDUM NO. 3

FOR THE CONSTRUCTION OF THE
CYPRESS SENIOR CENTER RENOVATIONS

Notice is hereby given that the following revisions, additions, and/or deletions are hereby made a part of and incorporated into the plans and specifications for the Cypress Senior Center Renovations.

PRE-BID SIGN-IN SHEET

TITLE 24

CHANGES TO PROJECT MANUAL – BIDDING AND CONTRACT DOCUMENTS

CHANGES TO PROJECT MANUAL – TECHNICAL SPECIFICATIONS

CHANGES TO PROJECT MANUAL – CONSTRUCTION DRAWINGS

QUESTIONS AND ANSWERS - Pre-bid meeting December 5, 2008; Contractor questions received by December 15, 2008

INSTRUCTIONS

The bidder must sign this addendum in the space provided below and return one signed copy with the bid. ***Failure to return the signed copy with bid documents shall not relieve the bidder of the obligation to include this addendum to the bid proposal. Bidder's failure to sign and submit any or all addenda with the bid shall be cause for rejection of the bid.***

APPROVED BY:

for KATY ALLEN
Director
Public Works Department

Bidder's Name _____

Signature and Title of Bidder Date

KJ:ls

CITY OF SAN JOSE
CAPITAL OF SILICON VALLEY

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CITY FACILITIES ARCHITECTURAL SERVICES DIVISION

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FOR THE CONSTRUCTION OF THE CYPRESS SENIOR CENTER RENOVATIONS

Notice is hereby given that the following revisions, additions, and/or deletions are hereby made a part of and incorporated into the plans and specifications for the Cypress Senior Center Renovations.

PRE-BID SIGN-IN SHEET

TITLE 24

CHANGES TO PROJECT MANUAL

I. Bidding and Contract Documents:

1. **Special Provisions** – Beginning of Work and Time of Completion – Sheet 53
   a. **Delete:** The contractor shall diligently prosecute the contract to completion before the expiration of *270 CALENDAR DAYS* from the first chargeable day as set forth in the "Notice to Proceed."
   b. **Add:** The Contractor shall diligently prosecute the contract to completion before the expiration of *180* CALENDAR DAYS which includes 55 CALENDAR DAYS for Phase 2 work, from the first chargeable day as set forth in the "Notice to Proceed."

II. Technical Specifications:

1. Section 01100 – Summary
   a. Add: 1.4A – 1: Mechanical Contractor shall submit equipment and shop drawing submittals for Phase I and Phase 2 for review together during phase 1. This is to eliminate submittal review and processing time during phase 2.
   b. Add: 1.4B 1. – Prior to commencing Phase 2 work, a 21 calendar day notice must be given to city staff. Please contact Linda Stewart at 408-535-8426 with this notice.
   c. Add: 1.4B 2. – The contractor shall diligently prosecute Phase 2 work to completion before the expiration of 55 Calendar Days. Phase 2 calendar days are included within the overall 180 calendar days for the project. Additional calendar days for Phase 2 will not be granted.

2. Section 16120 – Low Voltage Conductors and Cables
   a. Delete: 3.1 A - Feeders: Copper. Solid for No. 10 AWG and smaller; stranded for No. 12 AWG and larger.
   b. Add: 3.1A - Feeders: Copper. Solid for No. 14 AWG and smaller; stranded for No. 12 AWG and larger.

c. Delete: 3.1B - Branch Circuits: Copper. Solid for No. 10 AWG and smaller; stranded for No. 8 AWG and larger.
d. Add: 3.1B - Branch Circuits: Copper. Solid for No. 14 AWG and smaller; stranded for No. 12 AWG and larger.

3. Section 16130 – Raceways and Boxes
   a. Delete: 2.1G Fitting for Conduit (Including all Types and Flexible and Liquidtight), EMT, and Cable: NEMA FB 1; listed for type and size raceway with which used, and for application and environment in which installed. Set screw type with insulated throat box connector.
   b. Add: 2.1G Fitting for Conduit (Including all Types and Flexible and Liquidtight), EMT, and Cable: NEMA FB 1; listed for type and size raceway with which used, and for application and environment in which installed. Compression type with insulated throat box connectors.

III. Construction Drawings:

1. Sheet A1.1
   a. Change: The titles of Building 1, 2 and 3 to Building A,B and C respectively.
   b. Add: Note 10 – Where ceiling tiles are damaged due to structural work required, replace with ceiling tile that is similar or the same in appearance as existing tile.

2. Sheet S0.1
   a. GENERAL NOTES
      1. Add: STRUCTURAL STEEL Section Attached.

3. Sheet S1.2
   a. Detail 1.2A:
      1. Delete: WATERPROOFING BY OTHERS, S.A.D.
      2. Add: WATERPROOFING, S.A.D.
      3. Delete: MECHANICAL UNIT, CURB ATTACHMENT TO SLEEPER PER MANUFACTURER. MIN. OF (10) – 3/8" DIAM. X 3-1/2" LAG SCREWS TOTAL (4 MIN. PER LONG SIDE)
      4. Add: MECHANICAL UNIT, CURB AND ISOLATOR ATTACHMENT TO SLEEPER PER MANUFACTURER.

4. Sheet MP1.1
   a. Demolish supply grille in storage room in Bldg A.
   b. Demolish supply diffuser and thermostat in Kitchen in Building B.

5. Sheet MP1.2
   a. Added note to demolish duct from Kitchen make up air unit.
   b. Added note to clarify demolition of refrigerant piping and controls for split system.

6. Sheet MP2.1
   a. Provide supply air for Library storage room in Building A.
   b. Added note to provide condensate drain from office fan coil unit and rooftop ac units to discharge into existing floor drain.

7. Sheet MP2.2
   a. Rooftop ac units condensate drain to go through roof and discharge into existing floor drain.

8. Sheet MP3.1
   a. Condensate drain from rooftop ac units to discharge into existing floor drain.

9. Sheet E.01
   a. Add: Note 20: Remove and reinstall any light fixtures in conflict with HVAC duct demolition work. Maintain (E) circuits and control wires to affected lights.

QUESTIONS AND ANSWERS – Pre-bid Meeting held on 12/05/08 and questions received by 12/15/08.

1Q. Will there be any asbestos containing material that will need to be removed?

1A. Yes, see Attachment VII of the Project Manual.

2Q. What are the acceptable work hours for this project?

2A. Refer to Specification Section 01100 – Part 1.5 of the Project Manual.

3Q. Per sheet A1.1, existing ceilings are to be removed in order to demo existing ductwork. In Buildings 1 and 3, several light fixtures appear to be in the path of the ceiling sections that are to be removed. Please specify what is to be done with the existing light fixtures in all affected areas.

3A. Refer to item #9 of this addendum, under Changes to Project Manual -Construction Drawings.

4Q. Refer to Specifications 15010-7 Item G: Cutting and Patching AND Item J: Carpentry. Will the General Contractor take care of this?

4A. Means and methods of construction are the general contractor's responsibility.

5Q. Refer to Specifications 15010-7 Item H: Vibration and Seismic Controls – Will the calculations be completed by the city?

5A. Refer to Construction Drawings Structural Sheets,15010-7 Item H and item #3 of this addendum under Changes to Project Manual – Construction Documents for clarification.

6Q. Refer to Specifications 15073 Vibration Isolation – What specific pieces of equipment require vibration isolation?

6A. Refer to Construction Drawings Sheet MP0.1 which specifies which pieces of equipment are vibration isolated.

7Q. Is this a prevailing wage job?

7A. Refer to Attachment V of the Project Manual.

8Q. Is this a union or non-union job?
8A. City has prevailing wage requirements, refer to Attachment V of the Project Manual. City does not have a mandate for union contractor.

CITY OF SAN JOSE
CAPITAL OF SILICON VALLEY

Meeting Sign-In

CYPRESS SENIOR CENTER

Pre-Bid Meeting Sign-In Sheet
8:30 a.m. Friday, December 5, 2008

Name	Company	Sub. or General	Email	Phone
1. DAVID C. MORENO	Reinhardt Roofing	Sub	DAVIDOREINHARDTROOFING.NET	(510)713-7014
2. RAMIN AFNANI	ICC GENERALS	GENERAL	ICC@ATT.NET	408-733-6656 FAX 733-6657
3. JOSE LOPEZ	J.J. ALBANESE	SUB		408 640 9887
4. PHILLIP CROSS	ALLIANCE ROOFING	SUB	PCROSS@ALLIANCEROOFINGCAL.COM	408-761-2180
5. DAN CROWLEY	CARRIER	SUB	DAN.CROWLEY@CARRIER.UTC.COM	650 465 1678
6. Al Aranburu	Icom	sub	ala@icominc.com	(408) 667-1738
7. Ron Helfrich	CEI	Sub	RON_HELFRICH@CEE.COM	408-639-2927
8. Tom Secoli	ICOM	SUB	TSECOLI@ICOMINC.COM	408 690 4735
9. Zack Fonseca	METRO PLUMBING	SUB	Zack@metro-plumbing.com	408 287 7551
10. Michael Rauschnot	MJR Electric	Sub	Michael@mjrelectric.com	
11. STAN STYCZYNSKI	SAN JOSE CONST.	GC	stan@sjconstruction.com	408 966-1521
12. DENNIS CAMPBELL	RICK SCHAFER CONST	SUB	dcampbell@rschafer.com	938-1900
13. Bob Kreitzer	Burdick Pat	sub	robert@burdickpainting.com	(408)567-1338

CITY OF SAN JOSE
CAPITAL OF SILICON VALLEY

Meeting Sign-In

CYPRESS SENIOR CENTER

Pre-Bid Meeting Sign-In Sheet
8:30 a.m. Friday, December 5, 2008

Name	Company	Sub. or General	Email	Phone
1. Cole Shanks	Kuehne Construction	GC	CShanks@Kuehne.com	408 845-0460
2. Daniel Riguero	Air Maze Services	Sub	driqueros@airmazeservices.com	408 738-0333
3. Dennis Brill	Kuehne Const	Gen'l	DBrill@Kuehneconstruction.com	8/732-4057
4. Chris Bakke	Penhall Company	Sub	[illegible].com	831 7351383
5. Jason Takahashi	Mid-State Elec	Sub	Jason@midstateelectricinc.com	408-529-2283
6. Mark Tucker	Tucker Const.	GC	tucker@tuckercon.com	408 287 1424
7. Uri Gottfeld	URI Mech	Sub	Uri@urimechanical.com	408-942 9600
8.				
9.				
10.				
11.				
12.				
13.				

CERTIFICATE OF COMPLIANCE (Part 1 of 3) MECH-1-C

PROJECT NAME CYPRESS SENIOR CENTER RENOVATIONS		DATE 12/15/08	
PROJECT ADDRESS 403 SOUTH CYPRESS AVE., SAN JOSE, CA 95117			Building Permit
PRINCIPAL DESIGNER-MECHANICAL PAUL O'NEILL - CB ENGINEERS	TELEPHONE (415) 437-7330		Checked by/Date Enforcement Agency Use
DOCUMENTATION AUTHOR GEWARGIS YOUSSEFI	TELEPHONE (408) 467-2800		

GENERAL INFORMATION

DATE OF PLANS 2008	BUILDING CONDITIONED FLOOR AREA 10769			CLIMATE ZONE 4
BUILDING TYPE	☒ NONRESIDENTIAL	☐ HIGH RISE RESIDENTIAL	☐ HOTEL/MOTEL GUEST ROOM	
PHASE OF CONSTRUCTION	☐ NEW CONSTRUCTION	☐ ADDITION	☒ ALTERATION	☐ UNCONDITIONED (FILE AFFIDAVIT)
PROOF OF ENVELOPE COMPLIANCE	☐ PREVIOUS ENVELOPE PERMIT		☐ ENVELOPE COMPLIANCE ATTACHED	

STATEMENT OF COMPLIANCE

This Certificate of Compliance lists the building features and performance specifications needed to comply with Title 24, Parts 1 and 6 of the California Code of Regulations. This certificate applies only to building mechanical requirements.

The documentation preparer hereby certifies that the documentation is accurate and complete.

DOCUMENTATION AUTHOR	SIGNATURE	DATE
GEWARGIS YOUSSEFI (CB Engineers)	G. Youssefi	12/15/08

The Principal Mechanical Designer hereby certifies that the proposed building design represented in this set of construction documents is consistent with the other compliance forms and worksheets, with the specifications, and with any other calculations submitted with this permit application. The proposed building has been designed to meet the mechanical requirements contained in the applicable parts of Sections 100, 101, 102, 110 through 115, 120 through 125, 142, 144 and 145.

☐ The plans & specifications meet the requirements of Part 1 (Sections 10-103a).

☐ The installation certificates meet the requirements of Part 1 (10-103a 3).

☐ The operation & maintenance information meets the requirements of Part 1 (10-103c).

Please check one: (These sections of the Business and Professions Code are printed in full in the Nonresidential Manual.)

☒ I hereby affirm that I am eligible under the provisions of Division 3 of the Business and Professions Code to sign this document as the person responsible for its preparation; and that I am licensed in the State of California as a civil engineer or mechanical engineer, or I am a licensed architect.

☐ I affirm that I am eligible under the exemption to Division 3 of the Business and Professions Code by Section 5537.2 or 6737.3 to sign this document as the person responsible for its preparation; and that I am a licensed contractor performing this work.

☐ I affirm that I am eligible under the exemption to Division 3 of the Business and Professions Code to sign this document because it pertains to a structure or type of work described pursuant to Business and Professions Code sections 5537, 5538, and 6737.1.

PRINCIPAL MECHANICAL DESIGNER-NAME	DATE	LIC. #
PAUL O'NEILL P.E.	12/15/08	M29440

INSTRUCTIONS TO APPLICANT MECHANICAL COMPLIANCE & WORKSHEETS (check box if worksheet is included)	
☐ MECH-1-C	Certificate of Compliance. Part 1 of 3, 2 of 3, 3 of 3 are required on plans for all submittals
☐ MECH-2-C	Air/Water/Service/Water Pools Requirements. Part 1 of 3, 2 of 3, 3 of 3 are required for all submittals, but may be on plans.
☐ MECH-3-C	Mechanical Ventilation and Reheat is required for all submittals with mechanical ventilation, but may be on plans.
☐ MECH-4-C	HVAC Misc. Prescriptive Requirements is required for all prescriptive submittals, but may be on plans.

AIR SYSTEM REQUIREMENTS (Part 1 of 3) MECH-2-C

PROJECT NAME: CYPRESS SENIOR CENTER RENOVATION **DATE:** 12/15/08

ITEM or SYSTEM TAG(S)		AIR SYSTEMS, Central or Single Zone				
		(CU/C-1)/(F/C-1)	(CU/C-2)/(F/C-2)	RTU-1	RTU-2	—
MANDATORY MEASURES	T-24 Section	Reference on Plans or Specification[1]				
Heating Equipment Efficiency	112(a)	92.5% AFUE	93% AFUE	80% AFUE	80% AFUE	
Cooling Equipment Efficiency	112(a)	15 SEER	15 SEER	13 SEER	13 SEER	
Heat Pump Thermostat	112(b)	NO	NO	NO	NO	
Furnace Controls	112(c), 115(a)	YES	YES	YES	YES	
Natural Ventilation	121(b)	NO	NO	NO	NO	
Minimum Ventilation	121(b)	564	180	1150	1150	
VAV Minimum Position Control	121(c)	N/A	N/A	N/A	N/A	
Demand Control Ventilation	121(c)	NO	NO	NO	NO	
Time Control	121(c), 122(e)	YES	YES	YES	YES	
Setback and Setup Control	122(e)	YES	YES	YES	YES	
Outdoor Damper Control	122(f)	YES	YES	YES	YES	
Isolation Zones	122(g)	NO	NO	NO	NO	
Pipe Insulation	123	YES	YES	N/A	N/A	
Duct Insulation	124	YES	YES	YES	YES	
PRESCRIPTIVE MEASURES						
Calculated Heating Capacity[2]	144(a & b)	—	—	—	—	
Proposed Heating Capacity[2]	144(a & b)	120 MBH	100 MBH	200/140 MBH	200/140 MBH	
Calculated Cooling Capacity[2]	144(a & b)	—	—	—	—	
Proposed Cooling Capacity[2]	144(a & b)	60 MBH	36 MBH	109 MBH	109 MBH	
Fan Control	144(c)	NO	NO	NO	NO	
DP Sensor Location	144(c)	—	—	—	—	
Supply Pressure Reset (DDC only)	144(c)	N/A	N/A	N/A	N/A	
Simultaneous Heat/Cool	144(d)	NO	NO	NO	NO	
Economizer	144(e)	NO	NO	YES	YES	
Heat and Cool Air Supply Reset	144(f)	N/A	N/A	N/A	N/A	
Duct Sealing	144(k)	NO	NO	NO	NO	

1: For each central and single zone air systems (or group of similar units) fill in the reference to sheet number and/or specification section and paragraph number where the required features are documented. If a requirement is not applicable, put "N/A" in the column.

2: Not required for hydronic heating or cooling. Either enter value here or put in reference to plans and specifications per footnote 1.

AIR SYSTEM REQUIREMENTS (Part 1 of 3) MECH-2-C

PROJECT NAME: CYPRESS SENIOR CENTER RENOVATION **DATE:** 12/15/08

ITEM or SYSTEM TAG(S)		AIR SYSTEMS, Central or Single Zone					
		(CU/A-1)/(F/A-1)	(CU/A-2)/(F/A-2)	(CU/B-1)/(F/B-1)	(CU/B-2)(F/B-2)	—	
MANDATORY MEASURES	T-24 Section	Reference on Plans or Specification[1]					
Heating Equipment Efficiency	112(a)	92.5% AFUE	92.5 AFUE	92.5% AFUE	93% AFUE		
Cooling Equipment Efficiency	112(a)	15 SEER	15 SEER	15 SEER	15 SEER		
Heat Pump Thermostat	112(b)	NO	NO	NO	NO		
Furnace Controls	112(c), 115(a)	YES	YES	YES	YES		
Natural Ventilation	121(b)	NO	NO	NO	NO		
Minimum Ventilation	121(b)	300	195	175	135		
VAV Minimum Position Control	121(c)	N/A	N/A	N/A	N/A		
Demand Control Ventilation	121(c)	NO	NO	NO	NO		
Time Control	121(c), 122(e)	YES	YES	YES	YES		
Setback and Setup Control	122(e)	YES	YES	YES	YES		
Outdoor Damper Control	122(f)	YES	YES	YES	YES		
Isolation Zones	122(g)	NO	NO	NO	NO		
Pipe Insulation	123	YES	YES	YES	YES		
Duct Insulation	124	YES	YES	YES	YES		
PRESCRIPTIVE MEASURES							
Calculated Heating Capacity[2]	144(a & b)	—	—	—	—		
Proposed Heating Capacity[2]	144(a & b)	120 MBH	120 MBH	120 MBH	60 MBH		
Calculated Cooling Capacity[2]	144(a & b)	—	—	—	—		
Proposed Cooling Capacity[2]	144(a & b)	60 MBH	48 MBH	60 MBH	24 MBH		
Fan Control	144(c)	NO	NO	NO	NO		
DP Sensor Location	144(c)	—	—	—	—		
Supply Pressure Reset (DDC only)	144(c)	N/A	N/A	N/A	N/A		
Simultaneous Heat/Cool	144(d)	NO	NO	NO	NO		
Economizer	144(e)	NO	NO	NO	NO		
Heat and Cool Air Supply Reset	144(f)	N/A	N/A	N/A	N/A		
Duct Sealing	144(k)	NO	NO	NO	NO		

1: For each central and single zone air systems (or group of similar units) fill in the reference to sheet number and/or specification section and paragraph number where the required features are documented. If a requirement is not applicable, put "N/A" in the column.

2: Not required for hydronic heating or cooling. Either enter value here or put in reference to plans and specifications per footnote 1.

AIR SYSTEM REQUIREMENTS (Part 1 of 3) MECH-2-C

PROJECT NAME: CYPRESS SENIOR CENTER RENOVATION **DATE:** 12/15/08

ITEM or SYSTEM TAG(S)		AIR SYSTEMS, Central or Single Zone				
		RTU-3	MAU-1	—	—	—
MANDATORY MEASURES	T-24 Section	Reference on Plans or Specification[1]				
Heating Equipment Efficiency	112(a)	80% AFUE	80% AFUE			
Cooling Equipment Efficiency	112(a)	13 SEER	13 SEER			
Heat Pump Thermostat	112(b)	NO	NO			
Furnace Controls	112(c), 115(a)	YES	YES			
Natural Ventilation	121(b)	NO	NO			
Minimum Ventilation	121(b)	1200	1750			
VAV Minimum Position Control	121(c)	N/A	N/A			
Demand Control Ventilation	121(c)	NO	NO			
Time Control	121(c), 122(e)	YES	YES			
Setback and Setup Control	122(e)	YES	YES			
Outdoor Damper Control	122(f)	YES	YES			
Isolation Zones	122(g)	NO	NO			
Pipe Insulation	123	N/A	N/A			
Duct Insulation	124	YES	YES			
PRESCRIPTIVE MEASURES						
Calculated Heating Capacity[2]	144(a & b)	—	—			
Proposed Heating Capacity[2]	144(a & b)	150/105 MBH	80 MBH			
Calculated Cooling Capacity[2]	144(a & b)	—	—			
Proposed Cooling Capacity[2]	144(a & b)	86 MBH	55.5 MBH			
Fan Control	144(c)	NO	NO			
DP Sensor Location	144(c)	—	—			
Supply Pressure Reset (DDC only)	144(c)	N/A	N/A			
Simultaneous Heat/Cool	144(d)	NO	NO			
Economizer	144(e)	YES	NO			
Heat and Cool Air Supply Reset	144(f)	N/A	N/A			
Duct Sealing	144(k)	NO	NO			

1: For each central and single zone air systems (or group of similar units) fill in the reference to sheet number and/or specification section and paragraph number where the required features are documented. If a requirement is not applicable, put "N/A" in the column.

2: Not required for hydronic heating or cooling. Either enter value here or put in reference to plans and specifications per footnote 1.

MECHANICAL VENTILATION AND REHEAT

MECH-3-C

Project Name: CYPRESS SENIOR CENTER RENOVATION

DATE: 12/15/08

	MECHANICAL VENTILATION (§121(b)2)								REHEAT LIMITATION (§144(d))				
	AREA BASIS			OCCUPANCY BASIS					VAV Minimum				
	A	B	C	D	E	F	G	H	I	J	K	L	M	N
	Zone / System	Condition Area (ft sq)	CFM per (ft sq)	Min CFM by Area (B x C)	Num of People	CFM per Person	Min CRM by Occupant (E x F)	REQ'D V.A. Max of E or G	Design Ventilation Air cfm	30% of Design Zone Supply cfm	B x 0.4 cfm/ft²	Max of Columns H, J, K, or 300 cfm	Design minimum Air setpoint	Transfer Air
CU/A-1)/(F/A-1)	1053	0.15	158	20	15	300	300	300	—	—	—	—	—
CU/A-2)/(F/A-2)	1050	0.15	158	13	15	195	195	195	—	—	—	—	—
CU/B-1)/(F/B-2)	1161	0.15	175	6	15	90	175	175	—	—	—	—	—
CU/B-2)/(F/B-2)	456	0.15	69	9	15	135	135	135	—	—	—	—	—
CU/C-1)/(F/C-1)	1485	0.38	564	35	15	525	564	564	—	—	—	—	—
CU/C-2)/(F/C-2)	531	0.15	80	12	15	180	180	180	—	—	—	—	—
RTU-1	1750	0.5	875	71	15	1065	1065	1150	—	—	—	—	—
RTU-2	1723	0.5	862	72	15	1080	1080	1150	—	—	—	—	—
RTU-3	1560	0.5	780	77	15	1155	1155	1200	—	—	—	—	—
MAU-1	0	—	—	—	15	—	—	1750	—	—	—	—	—
					15								
					15								
			Totals	315			4849	6799			Column I Total Design Ventilation Air		—

C	Minimum ventilation rate per Section §121, Table 121-A.
E	Based on fixed seat or the greater of the expected number of occupants and 50% of the CBC occupant load for egress purposes for spaces without fixed seating.
H	Required Ventilation Air (REQ'D V.A.) is the larger of the ventilation rates calculated on an AREA BASIS or OCCUPANCY BASIS (Column D or G).
I	Must be greater than or equal to H, or use Transfer Air (column N) to make up the difference.
J	Design fan supply cfm (Fan CFM) x 30%; or
K	Condition area (ft²) x 0.4 cfm/ft²; or
L	Maximum of Columns H, J, K, or 300 cfm
M	This must be less than or equal to Column L and greater than or equal to the sum of Columns H plus N.
N	Transfer Air must be provided where the Required Ventilation Air (Column I) is greater than the Design Minimum Air (Column M). Where required, transfer air must be greater than or equal to the difference between the Required Ventilation Air (Column H) and the Design Minimum Air (Column I), Column H minus M.

HVAC MISC. PRESCRIPTIVE REQUIREMENTS:			MECH-4-C
PROJECT NAME	CYPRESS SENIOR CENTER RENOVATIONS	DATE 12/15/08	

FAN POWER CONSUMPTION §144(c)

NOTE: Provide one copy of this worksheet for each fan system with a total fan system horsepower greater than 25 hp for Constant Volume Fan Systems or Variable Air Volume (VAV) Systems when using the Prescriptive Approach.

A	B	C	D	E	F
FAN DESCRIPTION	DESIGN BRAKE HP	EFFICIENCY MOTOR	EFFICIENCY DRIVE	NUMBER OF FANS	PEAK WATTS B x E x 746 / (C x D)
N/A	—	—	—	—	—
(FAN MOTOR < 25HP)					

FILTER PRESSURE ADJUSTMENT Equation. 144-A	**Total Adjustments**		
	1) Total Fan System Power (Peak Watts, Sum of Column F)		
A) If filter pressure drop is greater than 1 inch W. C. enter filter pressure drop. SP_a on line 4 and Total Fan pressure SP_f on Line 5.	2) Supply Design Airflow (CFM)		
	3) Total Fan System Power Index (Row1/Row2)[1] W/cfm		
B) Calculate Fan Adjustment and enter on line 6.	4) SP_a		
	5) SP_f		
C) Calculate Adjusted Fan Power Index and enter on Row 7	6) Fan Adjustment = $1-(SP_a - 1)/SP_f$		
	7) Adjusted Fan Power Index (Line 3 x Line 6)[1] W/cfm		

1. TOTAL FAN SYSTEM POWER INDEX or ADJUSTED FAN POWER INDEX must not exceed 0.8 w/cfm, for Constant Volume systems or 1.25 w/cfm for VAV systems

ITEM or SYSTEM TAG(S)				
PRESCRIPTIVE MEASURES	*T-24 Section*	Capacity	Exception	*Notes*
Electric Resistance Heating[1]	§144 (g)	N/A		
Heat Rejection System[2]	§144 (h)	N/A		
Air Cooled Chiller Limitation[3]	§144 (i)	N/A		

1. Total installed capacity (MBtu/hr) of all electric heat on this project exclusive of electric auxiliary heat for heat pumps. If electric heat is used explain which exception(s) to §144(g) apply.
2. Are centrifugal fan cooling towers used on this project? (Enter "Yes" or "No") If centrifugal fan cooling towers are used explain which exception(s) to §144(h) apply.
3. Total installed capacity (tons) of all chillers and air cooled chillers under this permit, If there are more than 100 tons of air-cooled chiller capacity being installed explain which exception(s) to §144(i) apply.

MECHANICAL MANDATORY MEASURES

Part 1 of 2 **MECH-MM**

PROJECT NAME	DATE
CYPRESS SENIOR CENTER RENOVATIONS	12/15/08

		DESCRIPTION	Designer	Enforcement
		Equipment and Systems Efficiencies		
X	§111	Any appliance for which there is a California standard established in the Appliance Efficiency Regulations will comply with the applicable standard.		
X	§115(a)	Fan type central furnaces shall not have a pilot light.		
X	§123	Piping, except that conveying fluids at temperatures between 60 and 105 degrees Fahrenheit, or within HVAC equipment, shall be insulated in accordance with Standards Section 123.		
X	§124	Air handling duct systems shall be installed and insulated in compliance with Sections 601, 602, 603, 604, and 605 of the 2001 CMC Standards.		
		Controls		
	§122(e)	Each space conditioning system shall be installed with one of the following:		
X	§122(e)1A	Each space conditioning system serving building types such as offices and manufacturing facilities (and all others not explicitly exempt from the requirements of Section 112 (d)) shall be installed with an automatic time switch with an accessible manual override that allows operation of the system during off-hours for up to 4 hours. The time switch shall be capable of programming different schedules for weekdays and weekends and have program backup capabilities that prevent the loss of the device's program and time setting for at least 10 hours if power is interrupted; or		
	§122(e)1B	An occupancy sensor to control the operating period of the system; or		
	§122(e)1C	A 4-hour timer that can be manually operated to control the operating period of the system.		
X	§122(e)2	Each space conditioning system shall be installed with controls that temporarily restart and temporarily operate the system as required to maintain a setback heating and/or a setup cooling thermostat setpoint.		
	§122(g)	Each space conditioning system serving multiple zones with a combined conditioned floor area more than 25,000 square feet shall be provided with isolation zones. Each zone: shall not exceed 25,000 square feet; shall be provided with isolation devices, such as valves or dampers, that allow the supply of heating or cooling to be setback or shut off independently of other isolation areas; and shall be controlled by a time control device as described above.		
X	§122(a&b)	Each space conditioning system shall be controlled by an individual thermostat that responds to temperature within the zone. Where used to control heating, the control shall be adjustable down to 55 degrees F or lower. For cooling, the control shall be adjustable up to 85 degrees F or higher. Where used for both heating and cooling, the control shall be capable of providing a deadband of at least 5 degrees F within which the supply of heating and cooling is shut off or reduced to a minimum.		
X	§122(c)	Thermostats shall have numeric setpoints in degrees Fahrenheit (F) and adjustable setpoint stops accessible only to authorized personnel.		
	§112(b)	Heat pumps shall be installed with controls to prevent electric resistance supplementary heater operation when the heating load can be met by the heat pump alone.		

MECHANICAL MANDATORY MEASURES

Part 2 of 2 **MECH-MM**

PROJECT NAME	DATE
CYPRESS SENIOR CENTER RENOVATIONS	12/15/08

		Description	Designer	Enforcement
Ventilation				
[X]	§121(e)	Controls shall be provided to allow outside air dampers or devices to be operated at the ventilation rates as specified on these plans.		
[X]	§122(f)	Gravity or automatic dampers interlocked and closed on fan shutdown shall be provided on the outside air intakes and discharges of all space conditioning and exhaust systems.		
[X]	§122(f)	All gravity ventilating systems shall be provided with automatic or readily accessible manually operated dampers in all openings to the outside, except for combustion air openings.		
[X]	§121(f)1	Air Balancing: The system shall be balanced in accordance with the National Environmental Balancing Bureau (NEBB) Procedural Standards (1983), or Associated Air Balance Council (AABC) National Standards (1989); or		
[ ]	§121(f)2	Outside Air Certification: The system shall provide the minimum outside air as shown on the mechanical drawings, and shall be measured and certified by the installing licensed C-20 mechanical contractor and certified by (1) the design mechanical engineer, (2) the installing licenced C-20 mechanical contractor, or (3) the person with overall responsibility for the design of the ventilation system; or		
[ ]	§121(f)3	Outside Air Measurement: The system shall be equipped with a calibrated local or remote device capable of measuring the quantity of outside air on a continuous basis and displaying that quantity on a readily accessible display divice; or		
[ ]	§121(f)4	Another method approved by the Commission.		
Service Water Heating Systems				
[X]	§113(b)2	If a circulating hot water system is installed, it shall have a control capable of automatically turning off the circulating pump(s) when hot water is not required.		
[X]	§113(c)	Lavatories in restrooms of public facilities shall be equipped with controls to limit the outlet temperature to 110 degrees F.		

KNOW ITS CONTENTS, AND SAID CLAIM IS MADE IN GOOD FAITH; THE SUPPORTING DATA IS TRUTHFUL AND ACCURATE; THAT THE AMOUNT REQUESTED ACCURATELY REFLECTS THE CONTRACT ADJUSTMENT FOR WHICH THE CONTRACTOR BELIEVES THE OWNER IS LIABLE; AND, FURTHER, THAT I AM FAMILIAR WITH CALIFORNIA PENAL CODE SECTION 72 AND CALIFORNIA GOVERNMENT CODE 12650, ET SEQ, PERTAINING TO FALSE CLAIMS, AND FURTHER KNOW AND UNDERSTAND THAT SUBMISSION OR CERTIFICATION OF A FALSE CLAIM MAY LEAD TO FINES, IMPRISONMENT, AND/OR OTHER SEVERE LEGAL CONSEQUENCES."

By

Title

Section 20-5, "Erosion Control," of the Standard Specifications (page 20-5) shall have the following added:

20-5.06 Temporary Erosion and Sediment Control. – Temporary erosion and sediment control within the total project shall conform to the Provisions in Section 20-5, "Erosion Control," of the Standard Specifications, these Special Provisions and the Plans.

The Contractor's attention is directed to Section 10-2, "Storm Water Pollution Prevention," of these Special Provisions.

Temporary erosion and sediment control work shall consist of applying erosion control materials to embankment slopes, excavation slopes and other areas designated on the plans, installing silt fence, inlet protection, gravel bags, headwall protection and stabilized construction entrance ways.

Measurement and Payment. – Full compensation for "Temporary Erosion and Sediment Control" shall be considered as included in the contract fixed lump sum price for Storm Water Pollution Prevention (Section 10-2 of these Special Provisions) and no separate payment shall be made therefore.

END OF AMENDMENTS

BEGINNING OF WORK AND TIME OF COMPLETION

~~The Contractor shall diligently prosecute the contract to completion before the expiration of *270* CALENDAR DAYS from the first chargeable day as set forth in the "Notice to Proceed."~~ **The Contractor shall diligently prosecute the contract to completion before the expiration of *180* CALENDAR DAYS which includes 55 CALENDAR DAYS for Phase 2 work, from the first chargeable day as set forth in the "Notice to Proceed."** NO ADDITIONAL DAYS WILL BE GRANTED FOR INCLEMENT WEATHER OR CONDITIONS RESULTING IMMEDIATELY THEREFROM except as noted in Section 8-1.06 of the Special Provisions.

LIQUIDATED DAMAGES

The Contractor shall pay to the City of San Jose the sum of $1,000 per day for each and every day's delay in finishing the work in excess of the number of days prescribed above.

SECTION 01100

SUMMARY

PART I - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings, General and Special Provisions of the Contract, including General Conditions and other Division I Specification Sections, apply to this Section.

1.2 SUMMARY

A. This Section includes the following:

1. Work covered by the Contract Documents.
2. Work restrictions.

B. Related Sections include the following:

1. Division 1 Section "Temporary Facilities and Controls" for limitations and procedures governing temporary use of City's facilities.

1.3 WORK COVERED BY CONTRACT DOCUMENTS

A. Project Identification: Cypress Senior Center Renovations, City of San Jose, CA.

1. Project Location: 403 Cypress Avenue
San Jose, CA 95117

B. Owner: City of San Jose

1. Owner's Representative: Linda Stewart, CE

C. Architect: Lili Matthews, Associate Architect

D. The Work consists of the following:

1. The Work includes: Upgrade to the existing HVAC System

1.4 WORK PHASES

A. The work shall be conducted in phases in the following order, with each phase substantially complete before beginning the next phase.

1. Phase 1: All work shown on the Construction Documents corresponding to Buildings A & C.
Mechanical Contractor shall submit equipment and shop drawing submittals for Phase I and Phase 2 for review together during phase 1. This is to eliminate submittal review and processing time during phase 2.

2. Phase 2: All work shown on the Construction Documents corresponding to Building B.

B. Before commencing each phase of work, submit a schedule showing the sequence, commencement and completion dates, and move-out and move-in dates of City's personnel for all phases of work.

1. Prior to commencing Phase 2 work, a 21 calendar day notice must be given to city staff. Please contact Linda Stewart at 408-535-8426 with this notice.

2. The contractor shall diligently prosecute Phase 2 work to completion before the expiration of 55 Calendar Days. Phase 2 calendar days are included within the overall 180 calendar days for the project. Additional calendar days for Phase 2 will not be granted.

1.5 WORK RESTRICTIONS

C. On-site Work Hours: Work shall be generally performed during normal business working hours of 7:00 a.m. to 7:00 p.m., Monday through Friday, except otherwise indicated.

1. Reference: City of San Jose Department of Public Works, Standard Specifications, July 1992, Section 8-1.06A.
2. Weekend Hours: Interior non-noisy work allowed with 72-hour notice to and written approval from the City of San Jose Department of Public Works Project Manager.
3. Early Morning Hours: Not allowed.
4. Hours for Utility Shutdown: *(when applicable).*
5. Limitations: Ordinance and amendments of Section 20.100.450 of Chapter 20.100 of the San Jose Municipal Code.

D. Existing Utility Interruptions: Do not interrupt utilities serving facilities occupied by City or others unless permitted under the following conditions and then only after arranging to provide temporary utility services according to requirements indicated:

1. Notify City not less than three (3) days in advance of proposed utility interruptions.
2. Do not proceed with utility interruptions without City's written permission.

1.6 OTHER PROVISIONS

A. Regulatory Requirements: Contractor shall comply with all local and state laws and ordinances.

B. Reference Standards: Contractor shall comply and incorporate into the work of the City of San Jose, Department of Public Works Standard Specifications, July 1992 edition.

C. The City of San Jose Department of Public Works City Facilities Architectural Services Division shall provide the awarded General Contractor at no cost a maximum of ten (10) construction sets in 36-inch by 48-inch drawings and 8 ½-inch by 11-inch technical manuals, with the addendums, if any, incorporated into the set and entitled "Issued for Construction Set." Additional sets are at the expense of the General Contractor.

1.7 OWNER FURNISHED, CONTRACTOR INSTALLED PRODUCTS

A. The Owner shall furnish existing items to be disconnected, relocated and installed by the Contractor. The cost of the disconnection, relocation design, installation and all connections and support for a fully operational installation shall be included in the Contract amount. The Work includes providing support systems to receive Owner's equipment, and mechanical and electrical connections, necessary for a fully operational installation.

1. The Contractor is responsible for disconnect of Owner equipment.
2. The Contractor shall coordinate with the Owner the pick-up, move and delivery of Owner-furnished equipment.
3. The Contractor is responsible for pick-up, moving, unloading, storing and handling of Owner-furnished items at the site.

4. The Contractor is responsible for protecting Owner-furnished equipment from damage, including damage form exposure to the elements. The Contractor shall repair or replace items damaged as a result of Contractor error.

1.8 OWNER SUPPLIED AND OWNER INSTALLED PRODUCTS

A. The Owner shall furnish and install new products. The Contractor shall provide design and support systems to receive Owner's equipment, and mechanical and electrical connections, necessary for a fully operational installation.

1. The Contractor is responsible for protecting Owner-furnished equipment from damage, including damage form exposure to the elements. The Contractor shall repair or replace items damaged as a result of Contractor error.

1.9 CONTRACTOR USE OF THE PREMISES

A. THE KITCHEN AND ADJACENT RESTROOM IN BUILDING B WILL REMAIN FULLY OPERATIONAL DURING PHASE 1 OF THE CONSTRUCTION OF THIS PROJECT.

B. In disconnecting, relocating and installing existing equipment, work shall be scheduled and coordinated with Owner to allow a maximum of fifty percent of day-to-day operations to be maintained at any one time.

C. Use of the Site: Limit use of the premises to work in areas indicated. Confine operations to areas within contract limits indicted. Do not disturb portions of the Site beyond the areas in which the Work is indicated.

1. Owner Occupancy: Allow access for the Owner and any agents of the Owner. The public shall be prevented from entering the project site until the Owner occupies the Site.
2. Driveways and Entrances: Keep driveways and entrances serving the premises clear and available to the Owner, the Owner's representatives, and emergency vehicles at all times. Do not use these areas for parking or storage of materials. Schedule deliveries to minimize space and time requirements for storage of materials and equipment.

D. Use of Existing Buildings: Maintain the existing buildings in a weathertight condition throughout the construction period. Repair damage caused by construction operations. Take all precautions necessary to protect the buildings during the construction period.

1.10 OCCUPANCY REQUIREMENTS

A. Partial Occupancy: The Owner reserves the right to occupy and to place and install equipment in completed areas of the buildings prior to Substantial Completion, provided such occupancy does not interfere with completion of the Work. Such placing of equipment and partial occupancy shall not constitute acceptance of the total Work.

1. The Owner's Project Manager shall prepare a Certificate of Substantial Completion for each specific portion of the Work to be occupied prior to Owner occupancy.
2. Obtain a Notice of Completion and Final Acceptance prior to Owner occupancy.
3. Prior to partial occupancy, mechanical and electrical systems shall be fully operational. Required inspection and tests shall have been successfully completed. Upon occupancy, the Owner will operate and maintain mechanical and electrical systems serving occupied portions of the building.
4. Upon occupancy, the Owner will assume responsibility for maintenance and custodial service for occupied portions of the building(s).

PART 2 – PRODUCTS

PART 3 – EXECUTION

PART 1 - MEASUREMENT AND PAYMENT

4.1 Separate measurement or payment will not be made for work required under this Section. All costs in connection with the work specified herein will be considered to be included with the related item of work in the Schedule of Values, incorporated into the General Conditions or incidental to the Work of this Contract.

END OF SECTION 01100

SECTION 16120

LOW-VOLTAGE ELECTRICAL POWER CONDUCTORS AND CABLES

PART 1 - GENERAL

1.1. This Section includes the following:

A. Building wires and cables rated 600 V and less.

B. Connectors, splices, and terminations rated 600 V and less.

C. Sleeves and sleeve seals for cables.

D. Conductor and conduit sizes in these contract documents are based on copper wire, and only copper wire shall be used. Aluminum cable is prohibited.

1.2. DEFINITIONS

A. EPDM: Ethylene-propylene-diene terpolymer rubber.

B. NBR: Acrylonitrile-butadiene rubber.

1.3. SUBMITTALS

A. Product Data: For each type of product indicated.

1.4. QUALITY ASSURANCE

A. Electrical Components, Devices, and Accessories: Listed and labeled as defined in NFPA 70, Article 100, and marked for intended use.

B. Comply with NFPA 70.

1.5. COORDINATION

A. Set sleeves in cast-in-place concrete, masonry walls, and other structural components as they are constructed.

PART 2 - PRODUCTS

2.1. Conductors and Cables

A. Manufacturers: Subject to compliance with requirements, provide products by one of the following:

1. Alcan Products Corporation; Alcan Cable Division.

2. American Insulated Wire Corp.; a Leviton Company.

3. General Cable Corporation.

4. Senator Wire & Cable Company.

5. Southwire Company.

B. Copper Conductors: Comply with NEMA WC 70.

C. Conductor Insulation: Comply with NEMA WC 70 for Types THHN-THWN

PART 3 - EXECUTION

3.1. CONDUCTOR MATERIAL APPLICATIONS

A. Feeders: Copper. Solid for No. ~~10~~ **14** AWG and smaller; stranded for No. 12 AWG and larger.

B. Branch Circuits: Copper. Solid for No. ~~10~~ **14** AWG and smaller; stranded for No. ~~8~~ **12** AWG and larger.

3.2. CONDUCTOR INSULATION AND MULTICONDUCTOR CABLE APPLICATIONS AND WIRING METHODS

A. Service Entrance: Type THHN-THWN, single conductors in raceway.

B. Exposed Feeders: Type THHN-THWN, single conductors in raceway.

C. Feeders Concealed in Ceilings, Walls, Partitions, and Crawlspaces: Type THHN-THWN, single conductors in raceway.

D. Feeders Concealed in Concrete, below Slabs-on-Grade, and Underground: Type THHN-THWN, single conductors in raceway.

E. Feeders in Cable Tray: Type THHN-THWN, single conductors in raceway.

F. Exposed Branch Circuits, Including in Crawlspaces: Type THHN-THWN, single conductors in raceway.

G. Branch Circuits Concealed in Ceilings, Walls, and Partitions: Type THHN-THWN, single conductors in raceway.

H. Branch Circuits in Cable Tray: Type THHN-THWN, single conductors in raceway.

I. Class 1 Control Circuits: Type THHN-THWN, in raceway.

J. Class 2 Control Circuits: Type THHN-THWN, in raceway.

3.3. INSTALLATION OF CONDUCTORS AND CABLES

A. Use pulling means, including fish tape, cable, rope, and basket-weave wire/cable grips, that will not damage cables or raceway.

B. Install exposed cables parallel and perpendicular to surfaces of exposed structural members, and follow surface contours where possible.

C. Support cables according to Division 16 Section "Hangers and Supports for Electrical Systems."

D. Identify and color-code conductors and cables according to the facility's existing system.

3.4. Connections

A. Tighten electrical connectors and terminals according to manufacturer's published torque-tightening values. If manufacturer's torque values are not indicated, use those specified in UL 486A and UL 486B.

B. Make splices and taps that are compatible with conductor material and that possess equivalent or better mechanical strength and insulation ratings than unspliced conductors.

3.5. SLEEVE INSTALLATION FOR ELECTRICAL PENETRATIONS

A. Coordinate sleeve selection and application with selection and application of firestopping specified in Division 07 Section "Penetration Firestopping."

3.6. Field Quality Control:

A. Test 600 volt conductors and cables.

B. Interpret test results in writing and submit to Engineer.

C. Replace conductors and cables that are found defective, at no expense to Owner.

SECTION 16130

RACEWAY AND BOXES FOR ELECTRICAL SYSTEMS

PART 1 - GENERAL

1.1. This Section includes raceways, fittings, boxes, enclosures, and cabinets for electrical wiring.

1.2. DEFINITIONS

A. EMT: Electrical metallic tubing.

B. ENT: Electrical nonmetallic tubing.

C. EPDM: Ethylene-propylene-diene terpolymer rubber.

D. FMC: Flexible metal conduit.

E. IMC: Intermediate metal conduit.

F. LFMC: Liquidtight flexible metal conduit.

G. LFNC: Liquidtight flexible nonmetallic conduit.

H. NBR: Acrylonitrile-butadiene rubber.

1.3. SUBMITTALS

A. Product Data: For surface raceways, wireways and fittings, floor boxes, hinged-cover enclosures, and cabinets.

B. Custom enclosures and cabinets.

1.4. QUALITY ASSURANCE

A. Electrical Components, Devices, and Accessories: Listed and labeled as defined in NFPA 70, Article 100, and marked for intended use.

B. Comply with NFPA 70.

PART 2 - PRODUCTS

2.1. Metal Conduit and Tubing

A. Manufacturers: Subject to compliance with requirements, provide products by one of the following:

1. AFC Cable Systems, Inc.

2. Alflex Inc.

3. Allied Tube & Conduit; a Tyco International Ltd. Co.

4. Anamet Electrical, Inc.; Anaconda Metal Hose.

5. Electri-Flex Co.

6. Manhattan/CDT/Cole-Flex.

7. Maverick Tube Corporation.

8. O-Z Gedney; a unit of General Signal.

9. Wheatland Tube Company.

B. Rigid Steel Conduit: ANSI C80.1.

C. IMC: ANSI C80.6.

D. PVC-Coated Steel Conduit: PVC-coated rigid steel conduit

E. Comply with NEMA RN 1.

F. LFMC: Flexible steel conduit with PVC jacket.

G. Fittings for Conduit (Including all Types and Flexible and Liquidtight), EMT, and Cable: NEMA FB 1; listed for type and size raceway with which used, and for application and environment in which installed. ~~Set-screw~~ **Compression** type with insulated throat box connectors.

H. Joint Compound for Rigid Steel Conduit or IMC: Listed for use in cable connector assemblies, and compounded for use to lubricate and protect threaded raceway joints from corrosion and enhance their conductivity.

2.2. OPTICAL FIBER/COMMUNICATIONS CABLE RACEWAY AND FITTINGS

A. Manufacturers: Subject to compliance with requirements, provide products by one of the following:

1. Arnco Corporation.

2. Endot Industries Inc.

3. IPEX Inc.

4. Lamson & Sessions; Carlon Electrical Products.

B. Description: Comply with UL 2024; flexible type Metal Wireways: NEMA 250

2.3. METAL WIREWAYS

A. Manufacturers: Subject to compliance with requirements, provide products by one of the following:

1. Cooper B-Line, Inc.

2. Hoffman.

3. Square D; Schneider Electric.

B. Description: Sheet metal sized and shaped as indicated, NEMA 250, Type 1 unless otherwise indicated.

C. Fittings and Accessories: Include couplings, offsets, elbows, expansion joints, adapters, hold-down straps, end caps, and other fittings to match and mate with wireways as required for complete system.

D. Finish: Manufacturer's standard enamel finish.

2.4. Boxes, Enclosures, and Cabinets

A. Manufacturers: Subject to compliance with requirements, provide products by one of the following:

1. Cooper Crouse-Hinds; Div. of Cooper Industries, Inc.

2. EGS/Appleton Electric.

3. Erickson Electrical Equipment Company.

4. Hoffman.

5. Hubbell Incorporated; Killark Electric Manufacturing Co. Division.

6. O-Z/Gedney; a unit of General Signal.

7. RACO; a Hubbell Company.

8. Robroy Industries, Inc.; Enclosure Division.

9. Scott Fetzer Co.; Adalet Division.

10. Spring City Electrical Manufacturing Company.

11. Thomas & Betts Corporation.

12. Walker Systems, Inc.; Wiremold Company (The).

13. Woodhead, Daniel Company; Woodhead Industries, Inc. Subsidiary.

B. Sheet Metal Outlet and Device Boxes: NEMA OS 1.

C. Cast-Metal Outlet and Device Boxes: NEMA FB 1, Type FD, with gasketed cover.

D. Hinged-Cover Enclosures: NEMA 250, Type 1, with continuous-hinge cover with flush latch.

PART 3 - EXECUTION

3.1. EXECUTION

A. RACEWAY APPLICATION

1. Outdoors: Rigid steel conduit.

2. Exposed Conduit: Rigid steel conduit.

B. Boxes and Enclosures, Aboveground: NEMA 250, Type 3R.

C. Comply with the following indoor applications, unless otherwise indicated:

1. Exposed, Not Subject to Physical Damage: EMT.

2. Concealed in Ceilings and Interior Walls and Partitions: EMT.

3. Connection to Vibrating Equipment (Including Transformers and Hydraulic, Pneumatic, Electric Solenoid, or Motor-Driven Equipment): FMC, except use LFMC in damp or wet locations.

D. Boxes and Enclosures: NEMA 250, Type 1.

E. Minimum Raceway Size: 3/4-inch (21-mm) trade size.

F. Raceway Fittings: Compatible with raceways and suitable for use and location.

G. Rigid and Intermediate Steel Conduit: Use threaded rigid steel conduit fittings, unless otherwise indicated.

H. PVC Externally Coated, Rigid Steel Conduits: Use only fittings listed for use with that material. Patch and seal all joints, nicks, and scrapes in PVC coating after installing conduits and fittings. Use sealant recommended by fitting manufacturer.

3.2. INSTALLATION

A. Comply with NECA 1 for installation requirements.

B. Keep raceways at least 6 inches (150 mm) away from parallel runs of flues and steam or hot-water pipes. Install horizontal raceway runs above water and steam piping.

C. Install no more than the equivalent of three 90-degree bends in any conduit run except for communications conduits, for which fewer bends are allowed.

D. Conceal conduit and EMT within finished walls, ceilings, and floors.

E. Threaded Conduit Joints, Exposed to Wet, Damp, Corrosive, or Outdoor Conditions: Apply listed compound to threads of raceway and fittings before making up joints. Follow compound manufacturer's written instructions.

F. Install pull wires in empty raceways.

G. Rigid Metal Conduit (RMC) permitted to be installed as follows:

1. Installations below grade and in or under concrete slabs.

2. All locations except corrosive atmospheres.

3. Hazardous locations.

4. Locations requiring mechanical protection.

H. Electrical Metallic Tubing (EMT) permitted to be installed as follows:

1. Interior partitions.

2. Above suspended ceilings.

3. In concrete slabs.

4. 6 ft AFF in exposed areas of mechanical equipment rooms.

5. Sizes 2" and smaller except as approved.

I. Liquid Tight Flexible Metal Conduit (LFMC) permitted to be installed as follows:

1. Use liquid tight flexible conduit, not over 4 ft in length, for final connections to:

2. Vibrating equipment (including transformers and hydraulic, pneumatic, electric solenoid, or motor-driven equipment) in wet locations.

3. Instruments and control devices.

J. Raceways for Optical Fiber and Communications Cable: Install raceways, metallic and nonmetallic, rigid and flexible, as follows:

1. 3/4-Inch (19-mm) Trade Size and Smaller: Install raceways in maximum lengths of 50 feet (15 m).

2. 1-Inch (25-mm) Trade Size and Larger: Install raceways in maximum lengths of 75 feet (23 m).

3. Install with a maximum of two 90-degree bends or equivalent for each length of raceway unless Drawings show stricter requirements. Separate lengths with pull or junction boxes or terminations at distribution frames or cabinets where necessary to comply with these requirements.

K. Field-cut openings for conduits according to enclosure manufacturer's written instructions. Cut wall of enclosure with a tool designed for material to be cut. Size holes for terminating fittings to be used, and seal around penetrations after fittings are installed.

3.3. SLEEVE INSTALLATION FOR ELECTRICAL PENETRATIONS

A. Concrete Slabs and Walls: Install sleeves for penetrations unless core-drilled holes or formed openings are used. Install sleeves during erection of slabs and walls.

B. Use pipe sleeves unless penetration arrangement requires rectangular sleeved opening.

C. Rectangular Sleeve Minimum Metal Thickness:

1. For sleeve cross-section rectangle perimeter less than 50 inches (1270 mm) and no side greater than 16 inches (400 mm), thickness shall be 0.052 inch (1.3 mm).

2. For sleeve cross-section rectangle perimeter equal to, or greater than, 50 inches (1270 mm) and 1 or more sides equal to, or greater than, 16 inches (400 mm), thickness shall be 0.138 inch (3.5 mm).

D. Fire-Rated Assemblies: Install sleeves for penetrations of fire-rated floor and wall assemblies unless openings compatible with firestop system used are fabricated during construction of floor or wall.

E. Cut sleeves to length for mounting flush with both surfaces of walls.

F. Extend sleeves installed in floors 2 inches (50 mm) above finished floor level.

G. Size pipe sleeves to provide 1/4-inch (6.4-mm) annular clear space between sleeve and raceway unless sleeve seal is to be installed.

H. Seal space outside of sleeves with grout for penetrations of concrete and masonry.

I. Fire-Rated-Assembly Penetrations: Maintain indicated fire rating of walls, partitions, ceilings, and floors at raceway penetrations. Install sleeves and seal with firestop materials.

J. Aboveground, Exterior-Wall Penetrations: Seal penetrations using sleeves and mechanical sleeve seals. Select sleeve size to allow for 1-inch (25-mm) annular clear space between pipe and sleeve for installing mechanical sleeve seals.

K. Underground, Exterior-Wall Penetrations: Install cast-iron "wall pipes" for sleeves. Size sleeves to allow for 1-inch (25-mm) annular clear space between raceway and sleeve for installing mechanical sleeve seals.

3.4. SLEEVE-SEAL INSTALLATION

A. Install to seal underground, exterior wall penetrations.

B. Use type and number of sealing elements recommended by manufacturer for raceway material and size. Position raceway in center of sleeve. Assemble mechanical sleeve seals and install in annular space between raceway and sleeve. Tighten bolts against pressure plates that cause sealing elements to expand and make watertight seal.

3.5. FIRESTOPPING

A. Apply firestopping to electrical penetrations of fire-rated floor and wall assemblies to restore original fire-resistance rating of assembly.

3.6. PROTECTION

A. Provide final protection and maintain conditions that ensure coatings, finishes, and cabinets are without damage or deterioration at time of Substantial Completion.

B. Repair damage to galvanized finishes with zinc-rich paint recommended by manufacturer.

C. Repair damage to PVC or paint finishes with matching touchup coating

SHEET NOTES

1. REMOVE (E) THERMOSTAT. PATCH AND PAINT WALL TO MATCH (E)
2. REMOVE EXISTING PLASTER TO DEMO DUCTS (SEE MECH. DWGS) REPAIR CEILING AND PAINT CELING TO MATCH (E)
3. REMOVE EXISTING 6X12 PLASTER TILES TO DEMO DUCTS (SEE MEC. DWGS) REPAIR CEILING AND PAINT CELING TO MATCH (E)
4. REMOVE EXISTING 6X6 ACOUSTIC TILES TO DEMO DUCTS (SEE MECH. DWGS) REPAIR CEILING AND PAINT CELING TO MATCH (E)
5. REMOVE EXISTING EXPOSED DUCT
6. CLOSE WALL OPENINGS
7. REMOVE EXISTING 12X12 CELING GRID TO DEMO DUCTS (SEE MECH. DWGS) REPAIR CEILING AND PAINT CELING TO MATCH (E)
8. REMOVE GRILL PATCH AND PAINT AT CELING EDGE
9. REMOVE GRILL AT OUTSIDE ROOF EVE UNDERSIDE REPARE UNDERSIDING TO MATCH (E)
10. WHERE CEILING TILES ARE DAMAGED DUE TO THE STRUCTURAL WORK REQUIRED, REPLACE WITH CEILING TILE THAT IS SIMILAR OR THE SAME IN APPEARANCE AS EXISTING TILE.

1 12/17/08

GENERAL NOTE

REFER TO SPECIFICATION SECTION FOR CEILING MATERIAL DATA.

ADDENDUM NO. 3
CYPRESS SENIOR CENTER
REFERENCE SHEET: A1.1

ADDENDUM NO.3
CYPRESS SENIOR CENTER
REFERENCE SHEET: S0.1

5. METAL FRAMING CONNECTORS REFERRED TO ON THE DRAWINGS ARE THOSE OF THE SIMPSON COMPANY, SAN LEANDRO. FOR CONNECTORS IN CONTACT OR CONNECTED THROUGH PRESSURE TREATED WOOD, USE Z-MAX OR HDG COATINGS. WHEN SUBMITTING SUBSTITUTIONS, INCLUDE SUBSTANTIATING DATA WITH ITEMIZED COMPARISONS FOR REVIEW BY THE ENGINEER.

CONCRETE:

A. MATERIALS:

CEMENT:	A.S.T.M. C150, TYPE II
AGGREGATE:	GRANITE OR LIMESTONE ONLY. ASTM C33, NORMAL WEIGHT.
CONCRETE:	F'c=2,500 PSI
SLUMP:	3.5" MAX.
SHRINKAGE:	LESS THAN 0.05%.

1 12/17/08

STRUCTURAL STEEL:

A. COMPLY WITH THE PROVISIONS OF CBC CHAPTER 22, AISC "SPECIFICATION FOR STRUCTURAL STEEL BUILDINGS" AND AISC "CODE OF STANDARD PRACTICE".

B. MATERIALS:

PLATES AND ANGLES: A.S.T.M. A-36

C. PAINT ONE SHOP COAT AND FIELD TOUCH UP WITH APPROVED PAINT: EXCLUDE AT LOCATIONS AND AREAS TO BE WELDED.

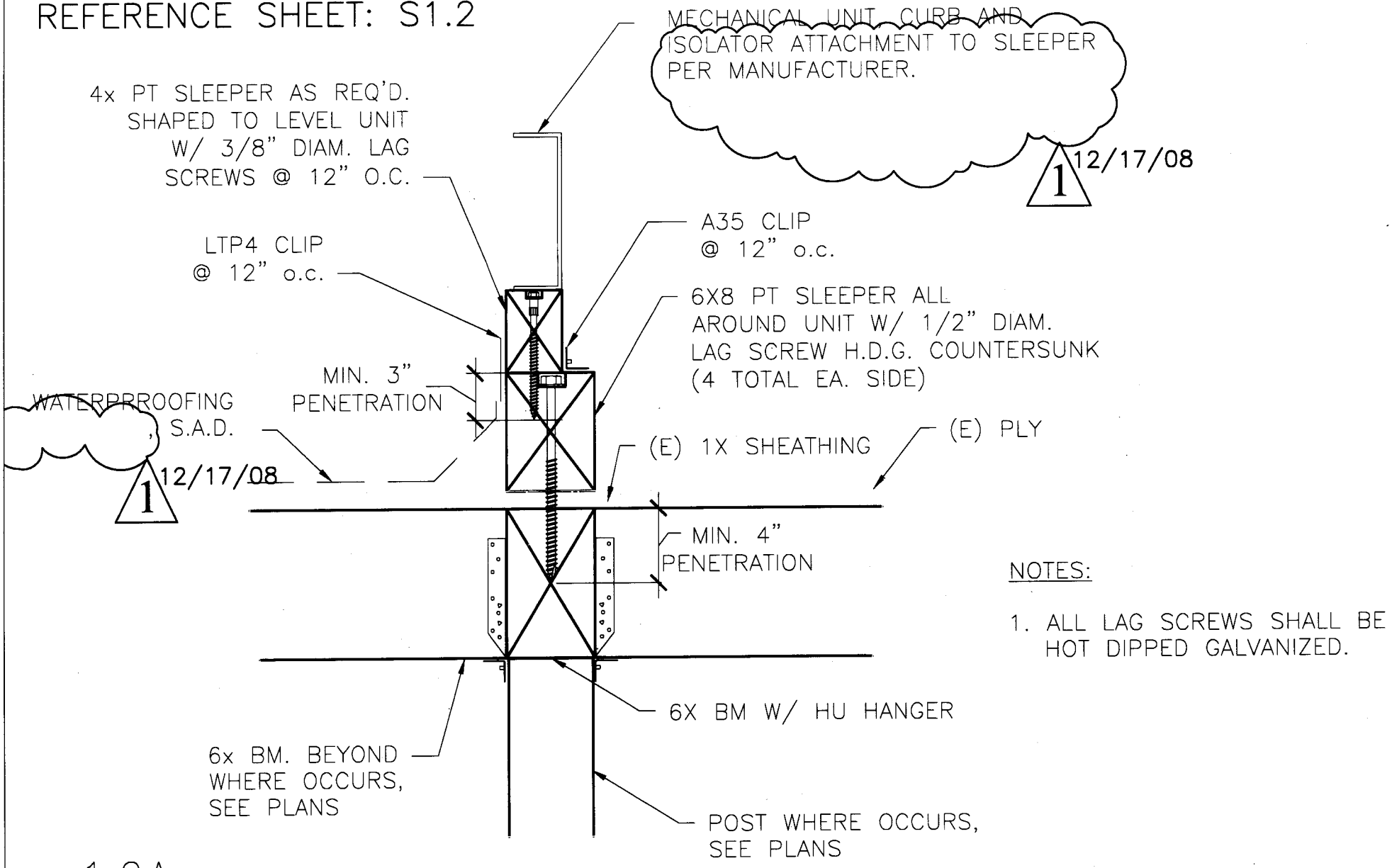
D. HOLES MAY BE 1/16" LARGER THAN BOLT DIAMETER EXCEPT HOLES TO FIT OVER ANCHOR BOLTS MAY BE 1/4" DIAMETER LARGER THAN BOLT DIAMETER.

E. STRUCUTRAL STEEL PERMANENTLY EXPOSED TO WEATHER SHALL RECIEVE TWO COATS OF SEMI-GLOSS ALKYD ENAMEL COMPATIBLE WITH PRIMER.

CONSTRUCTION LIABILITY:

THE CONSTRUCTION CONTRACTOR AND HIS SUBCONTRACTORS AGREE THAT IN ACCORDANCE WITH GENERALLY ACCEPTED CONSTRUCTION PRACTICES, THE CONSTRUCTION CONTRACTOR AND HIS SUBCONTRACTORS WILL BE REQUIRED

ADDENDUM NO.3
CYPRESS SENIOR CENTER
REFERENCE SHEET: S1.2

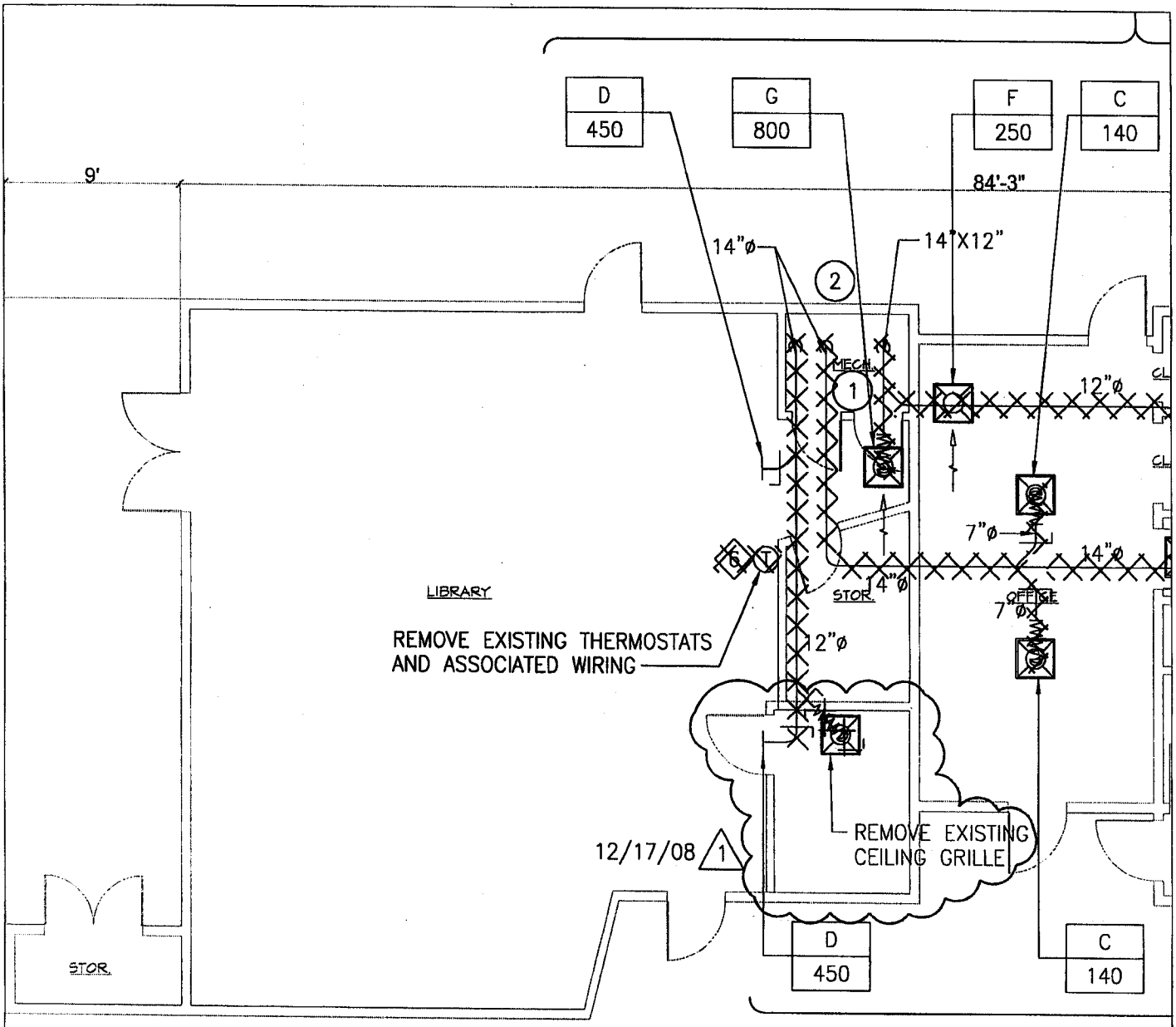


NOTES:

1. ALL LAG SCREWS SHALL BE HOT DIPPED GALVANIZED.

1.2A

SCALE: 1 1/2"=1'-0"



BUILDING A

CYPRESS SENIOR CENTER 0613

PARTIAL DEMOLITION MECHANICAL FIRST FLOOR PLAN - BUILDING A

SCALE:	REVISION:	
1/8"=1'-0"	Addendum #3	A3-M1
DATE:	REFERENCE:	
12/17/08	MP1.1	

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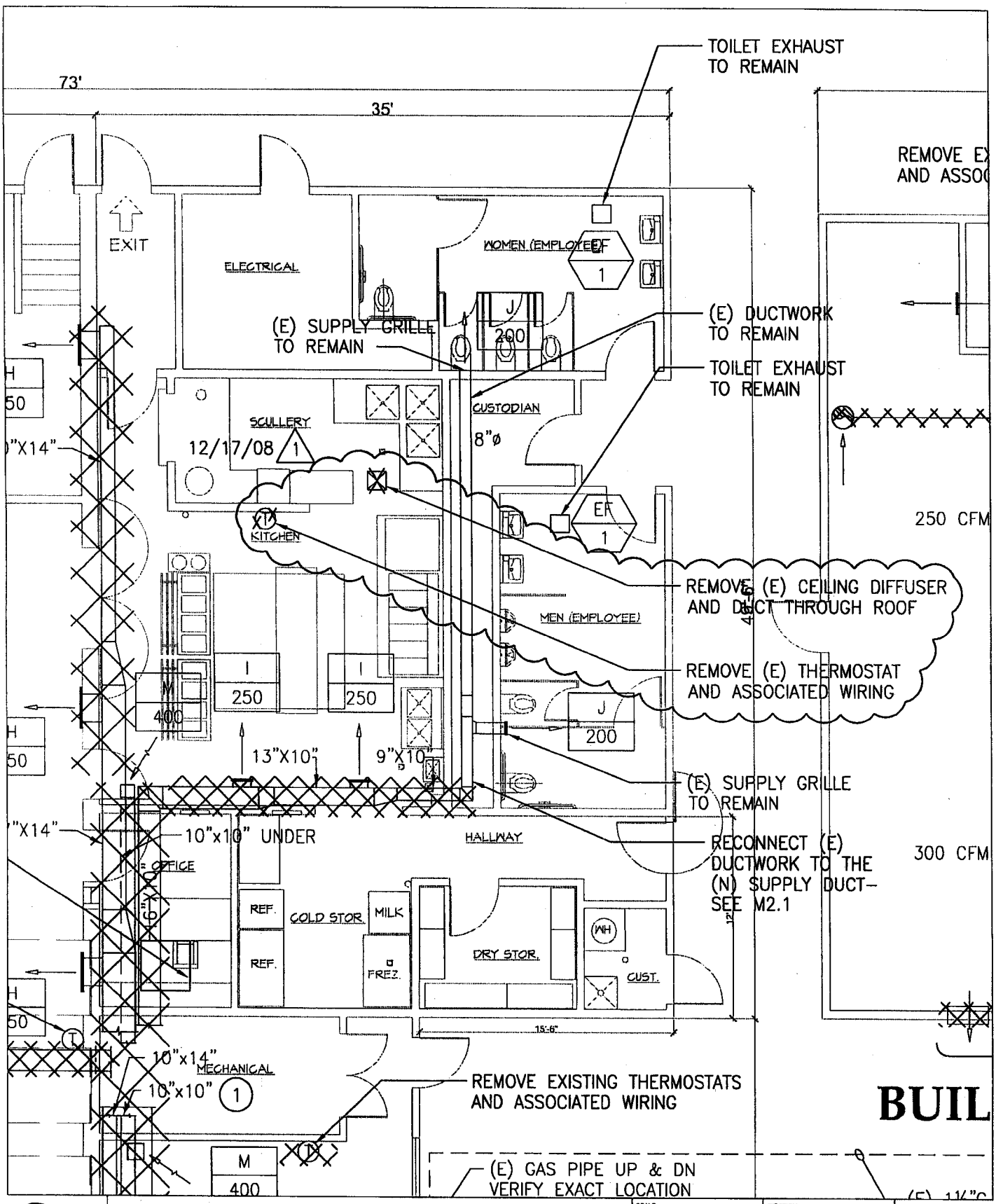

CYPRESS SENIOR CENTER 0613

PARTIAL DEMOLITION MECHANICAL FIRST FLOOR PLAN - BUILDING B

SCALE:	REVISION:	
1/8"=1'-0"	Addendum #3	A3-M2
DATE:	REFERENCE:	
12/17/08	MP1.1	

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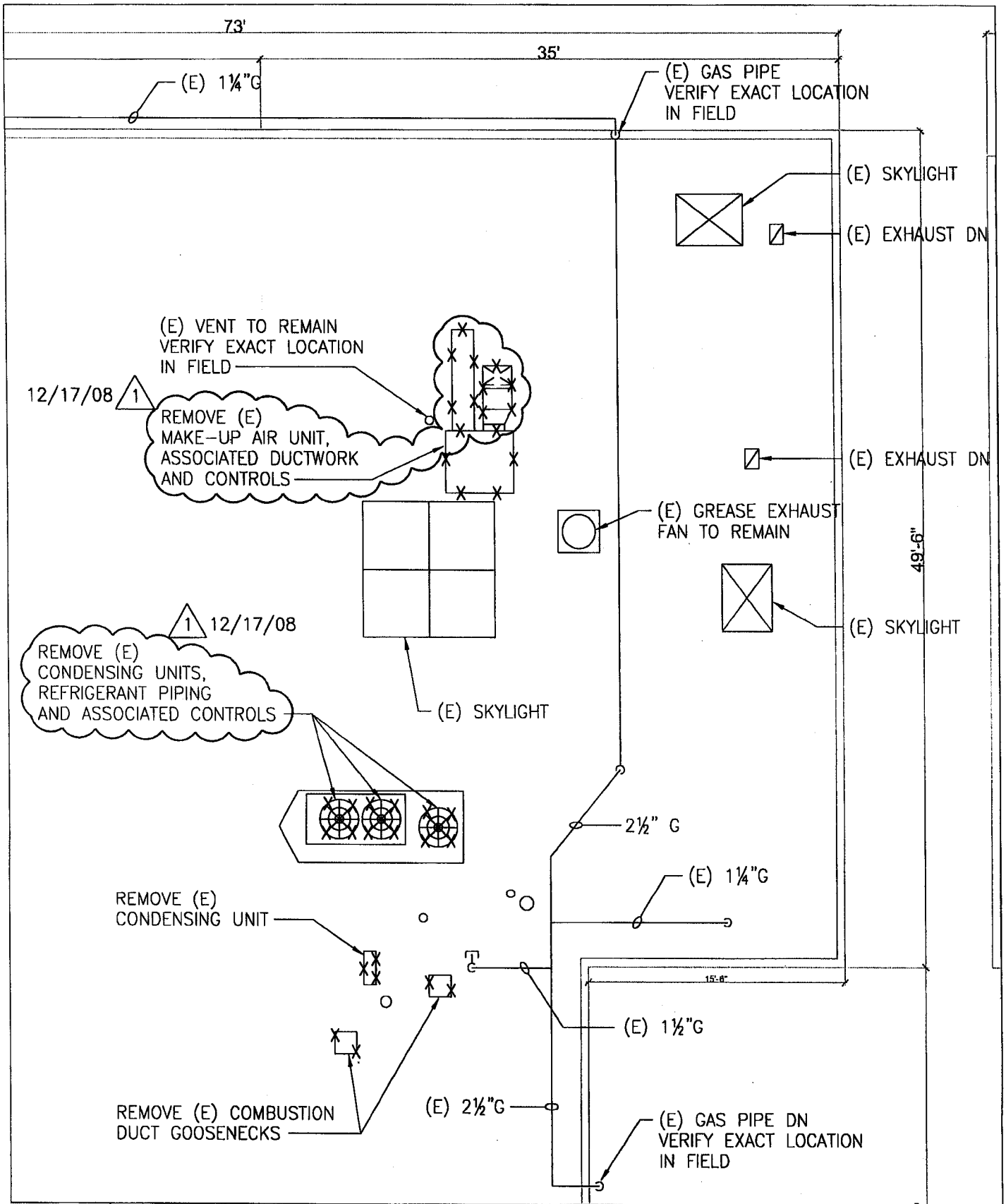

CYPRESS SENIOR CENTER 0613

PARTIAL DEMOLITION MECHANICAL ROOF PLAN - BUILDING B

SCALE:	REVISION
1/8"=1'-0"	Addendum #3
DATE:	REFERENCE:
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A3-M3

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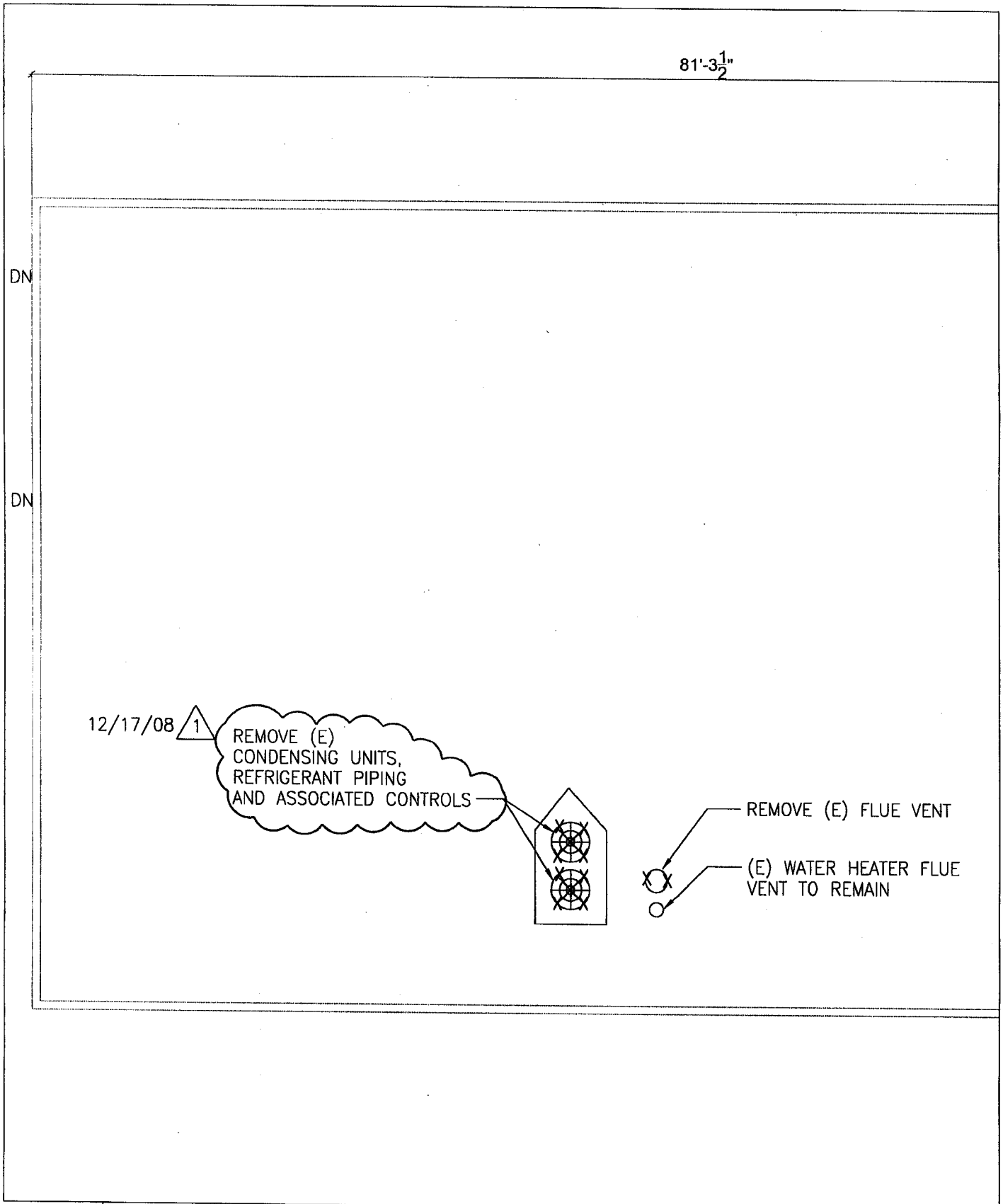

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PARTIAL DEMOLITION MECHANICAL ROOF PLAN - BUILDING C

SCALE:	REVISION:	
1/8"=1'-0"	Addendum #3	A3-M4
DATE:	REFERENCE:	
12/17/08	MP1.2	

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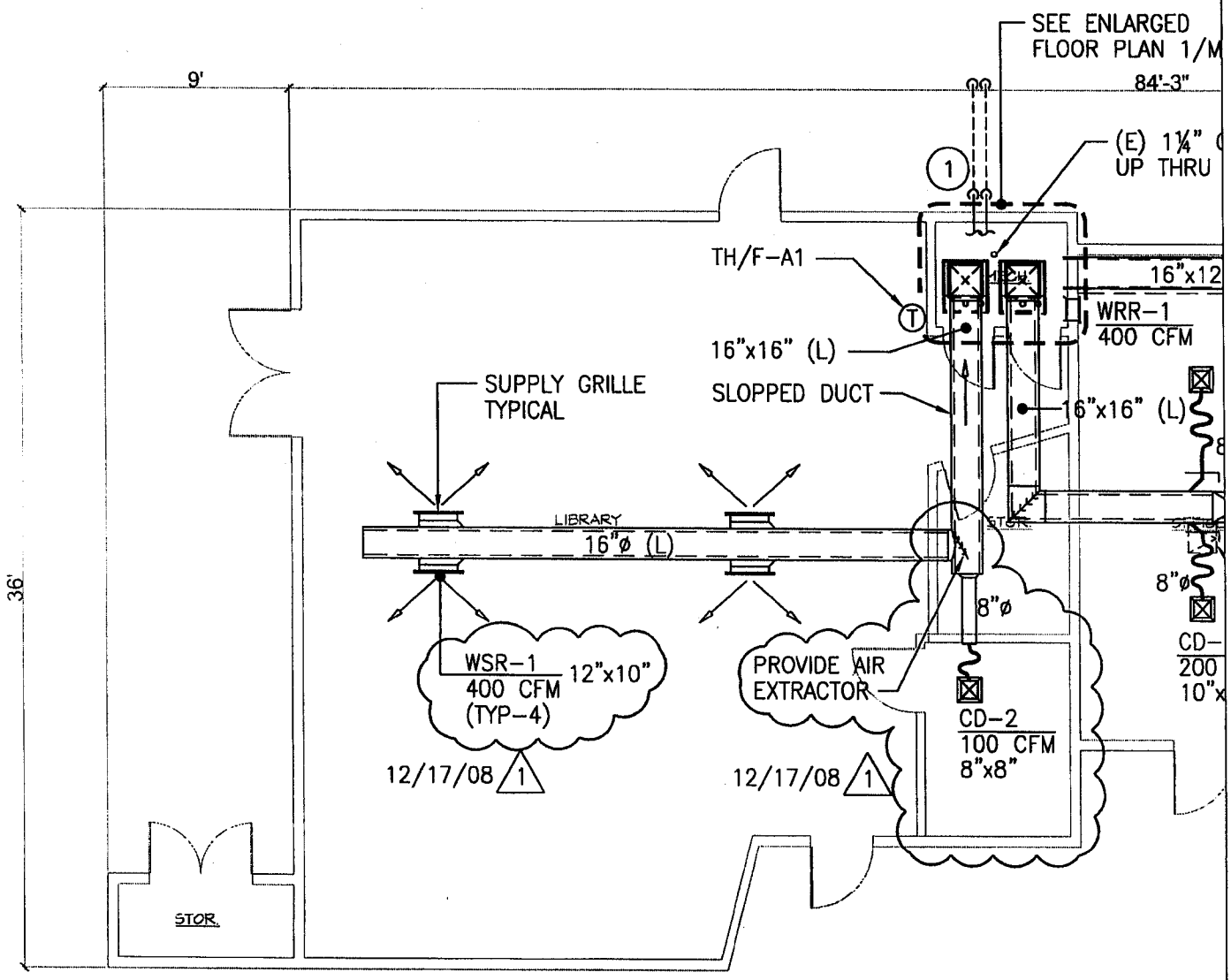

BUILDING A

CYPRESS SENIOR CENTER 0613

PARTIAL MECHANICAL FIRST FLOOR PLAN - BUILDING A

SCALE:	REVISION:	
1/8"=1'-0"	Addendum #3	A3-M5
DATE:	REFERENCE:	
12/17/08	MP2.1	

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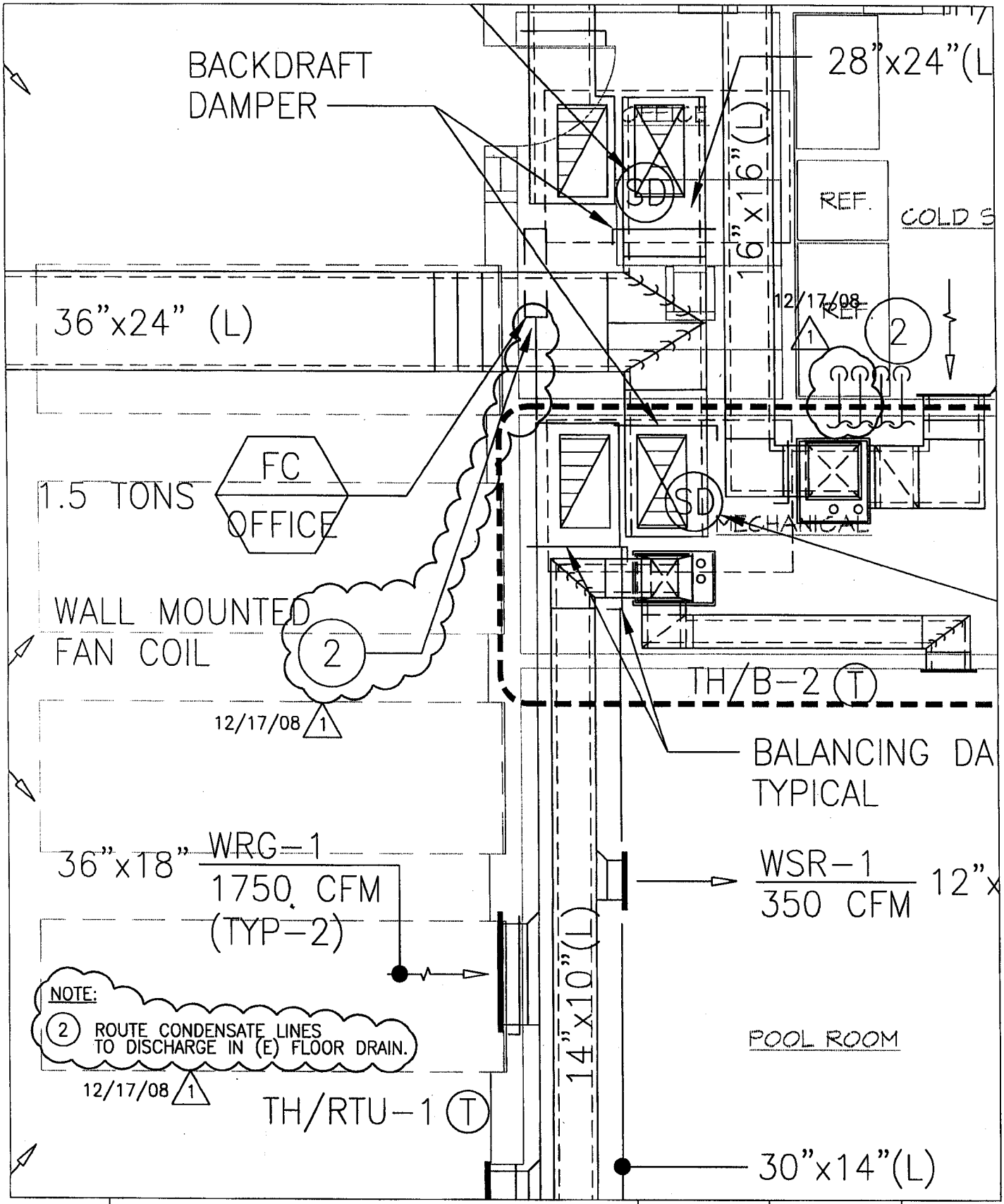

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PARTIAL MECHANICAL FIRST FLOOR PLAN - BUILDING B

SCALE:	REVISION:	
1/4"=1'-0"	Addendum #3	A3-M6
DATE:	REFERENCE:	
12/17/08	MP2.1	

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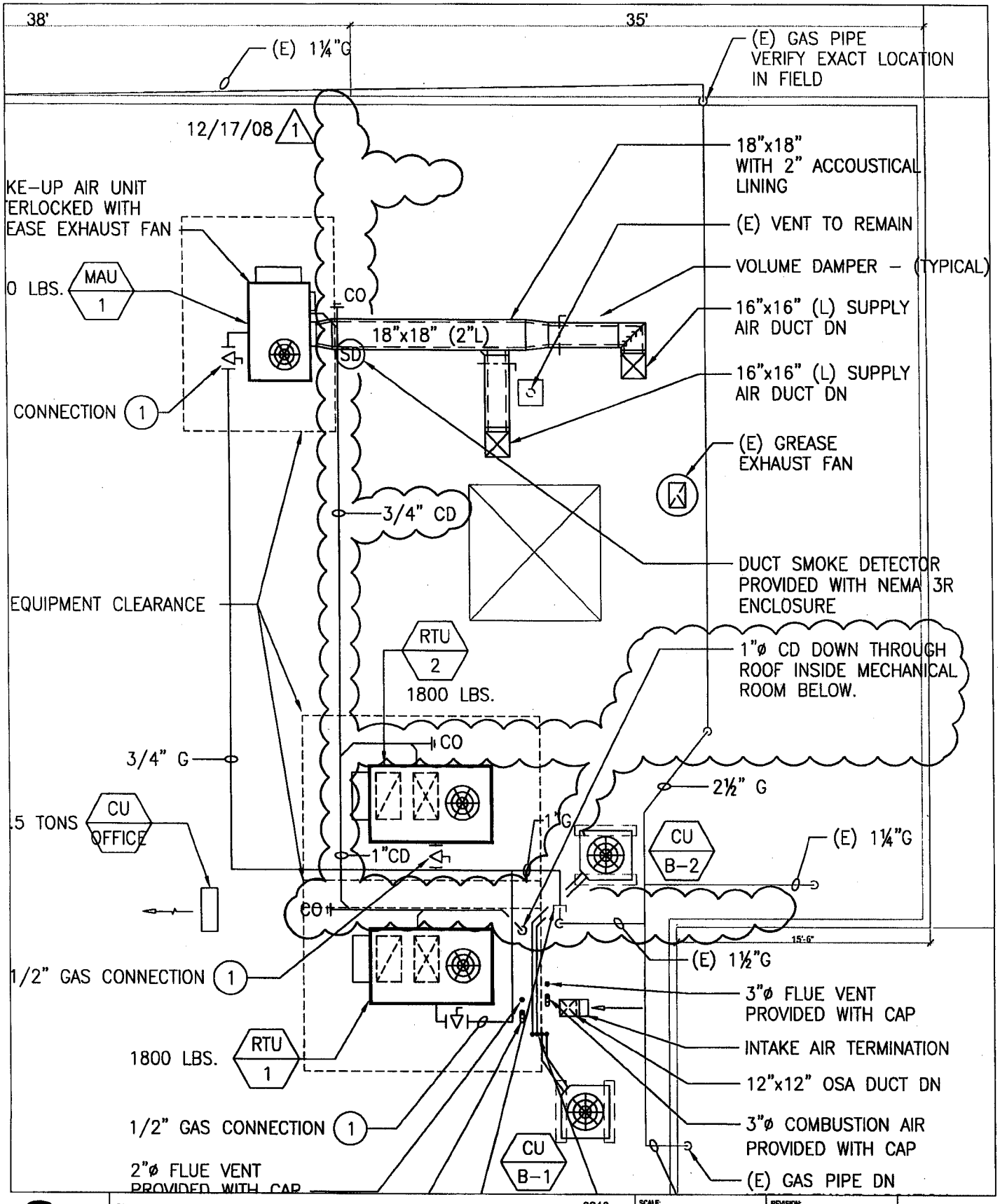

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PARTIAL MECHANICAL ROOF PLAN - BUILDING B

SCALE:	REVISION:	
1/8"=1'-0"	Addendum #3	A3-M7
DATE:	REFERENCE:	
12/17/08	MP2.2	

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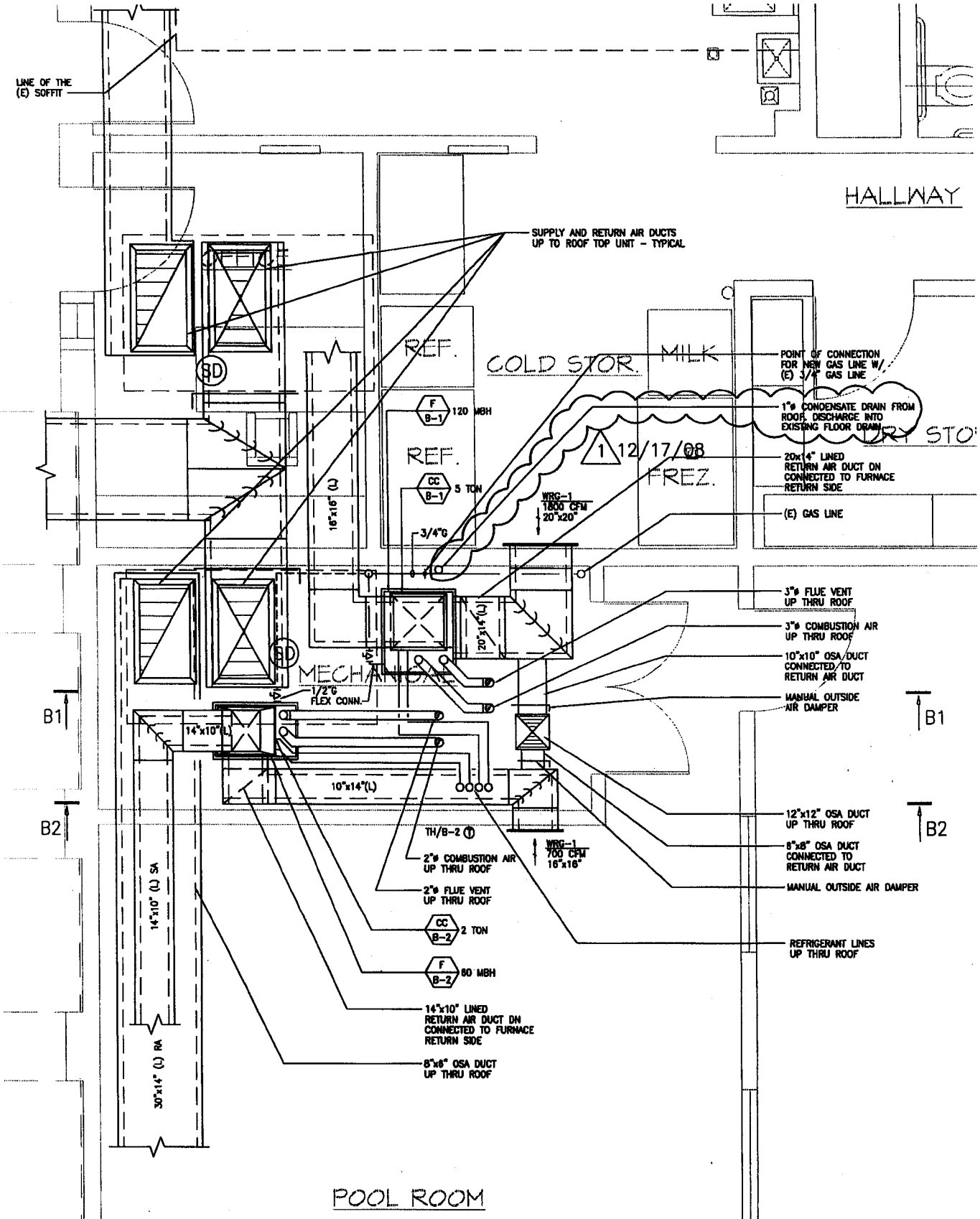

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0613

ENLARGED MECHANICAL ROOM - BUILDING B

SCALE:	REVISION:	
1/4"=1'-0"	Addendum #3	A3-M8
DATE:	REFERENCE:	
12/17/08	MP3.1	

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GENERAL NOTES

1. EXAMINE ALL DRAWINGS AND FIELD VERIFY (E) ELECTRICAL CONDITIONS INCLUDING VOLTAGES, EXISTING CIRCUITS AND EXACT ROUTING OF ALL CONDUITS AND CONDITIONS IN AND AROUND CONDUIT RUNS.
2. COORDINATE ALL WORK SO THAT INTERFERENCE BETWEEN ALL TRADES SHALL BE AVOIDED.
3. PERFORM WORK IN ACCORDANCE WITH THE LATEST EDITIONS, REVISIONS, AMENDMENTS OR SUPPLEMENTS OF APPLICABLE STATUES, ORDINANCES, CODES OR REGULATIONS OF STATE AND LOCAL AUTHORITIES HAVING JURISDICTION.
4. REPORT ANY DISCREPANCY TO ENGINEER PRIOR TO ANY WORK.
5. CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTION AND PROVIDE REPAIR OF ADJACENT EXISTING SURFACES, AREAS AND PROPERTY THAT MAY BE DAMAGED AS A RESULT OF NEW WORK.
6. COORDINATE ALL WORK AND SHUTDOWNS WITH THE CITY REPRESENTATIVE.
7. THE DRAWINGS ARE DIAGRAMMATIC AND SHALL NOT BE SCALED TO DETERMINE EXACT LOCATION OF ELECTRICAL EQUIPMENT. THE CONTRACTOR SHALL BE RESPONSIBLE FOR INSTALLING CONDUITS, SURFACE-MOUNTED RACEWAYS, FITTINGS AND JUNCTION BOXES TO CONFORM WITH FIELD CONDITIONS. CONTRACTOR IS RESPONSIBLE FOR ADEQUATELY REINFORCING WALLS AND/OR CEILINGS TO SUPPORT LIGHT FIXTURE WEIGHT. COMPLY WITH CURRENT APPLICABLE CODES.
8. THE INSTALLATION OF THIS PROJECT SHALL BE MADE IN COMPLIANCE WITH THE LATEST AND APPLICABLE CODES AND STANDARDS.
9. ALL CONCEALED RACEWAY TO BE ELECTRICAL METALLIC TUBING (EMT). ALL EXPOSED RACEWAY TO BE RIGID GALVANIZED STEEL CONDUIT RACEWAY UNLESS OTHERWISE NOTED.
10. CONTRACTOR TO FIELD VERIFY ALL DIMENSIONS AND MOUNTING HEIGHTS PRIOR TO ELECTRICAL EQUIPMENT/DEVICE INSTALLATION.
11. VERIFY (E) CIRCUITING PRIOR TO ANY WORK. MAINTAIN POWER TO ALL UN-AFFECTED AREA.
12. MAINTAIN ALL BUILDING SECURITY & FIRE PROTECTION SYSTEMS AT ALL TIME.
13. COORDINATE WITH MECHANICAL FOR EXACT LOCATION OF THE EQUIPMENT.
14. ALL CONDUITS THROUGH FIRE RATED WALL AND FLOOR SHALL BE SEALED WITH CODE APPROVED FIRE STOP MATERIAL.
15. THE CONTRACTOR SHALL MINIMIZE ANY ELECTRICAL DISRUPTIONS TO THE FACILITY WHICH SHALL REMAIN IN USE DURING CONSTRUCTION. ANY SHUTDOWN IN POWER TO THE FACILITY SHALL REQUIRE TWO WEEKS ADVANCE NOTICE TO THE CITY.
16. CONTRACTOR SHALL GIVE AT LEAST TWO WEEKS ADVANCE NOTICE TO PERFORM WORK IN CLASSROOMS. CLASSROOMS WILL REMAIN IN USE DURING CONSTRUCTION. CONTRACTOR SHALL FINISH INSTALLATION IN EACH CLASSROOM SEQUENTIALLY TO MINIMIZE DOWNTIME.
17. AN ELECTRICAL PERMIT IS REQUIRED BEFORE THE START OF ANY ELECTRICAL WORK. OBTAIN A "NO FEE" ELECTRICAL PERMIT FROM THE ELECTRICAL INSPECTOR. SCHEDULE INSPECTIONS 48 HOURS IN ADVANCE.
18. ALL WORK SHALL BE PERFORMED BY A C-10 LICENSED CONTRACTOR IN THE STATE OF CALIFORNIA POSSESSING A SAN JOSE BUSINESS LICENSE.
19. CONTRACTOR TO PROVIDE AND ARRANGE FOR ANY TEMPORARY CONSTRUCTION POWER AND TELEPHONE SERVICES REQUIRED FOR THE PROJECT.
20. REMOVE AND REINSTALL ANY LIGHT FIXTURES IN CONFLICT WITH HVAC DUCT DEMOLITION WORK. MAINTAIN (E) CIRCUITS AND CONTROL WIRES TO AFFECTED LIGHTS.

1 12/17/08

SHEET E0.1